

Serial No.: 09/808,732 Filed: March 14, 2001



1. A matrix comprising solid space and interstitial space wherein said interstitial space further comprises an interstitial polymer network.

- 2. The matrix of claim 1 wherein said solid space comprises solid particles.
- 3. The matrix of claim 2 wherein said interstitial polymer network is attached to one of said solid particles.
- 4. The matrix of claim 2 wherein said attachment comprises at least one covalent linkage to said solid particle.
- 5. The matrix of claim 2 wherein said interstitial polymer network spans at least two of said solid particles.
- 6. The matrix of claim 2 wherein said interstitial polymer network further comprises a tether molecule.
- 7. The matrix of claim 2 wherein said solid support further comprises a blocking reagent.
- 8. The matrix of claim 2 wherein said interstitial polymer network comprises a cross-linked polymer.
- 9. The matrix of claim 2 wherein said interstitial polymer network further comprises a functional group.
- 10. The matrix of claim 9 wherein said functional group further comprises a member of a binding pair.
- 11. The matrix of claim 9 wherein said functional group further comprises a first reactive moiety.
- 12. The matrix of claim 11 wherein said moiety comprises a chemical catalyst, an enzyme or a chemical reagent.